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| APPLICATION NO.                             | FILING DATE           | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.     | CONFIRMATION NO.   |  |
|---|-----------------------|----------------------|-------------------------|--------------------|--|
| 09/644,463                                  | 08/23/2000            | Matthew B. Haycock   | 884.303US1              | 2625               |  |
| 21186                                       | 7590 06/09/20         |                      |                         |                    |  |
| SCHWEGMAN, LUNDBERG, WOESSNER & KLUTH, P.A. |                       |                      | EXAMINER                |                    |  |
| P.O. BOX 2<br>MINNEAP                       | 938<br>OLIS, MN 55402 | ·                    |                         | PHAN, RAYMOND NGAN |  |
|   |                       |                      | ART UNIT                | PAPER NUMBER       |  |
|   |                       |                      | 2181                    |                    |  |
|   |                       |                      | DATE MAILED: 06/09/2003 |                    |  |

Please find below and/or attached an Office communication concerning this application or proceeding.

| i e   |  |  |  |  |  |  |
|---|--|--|--|--|--|--|
|   | Application No.  | Applicant(s)   |  |  |  |  |
|   | 09/644,463   | HAYCOCK ET AL.                                       |  |  |  |  |
| Office Action Summary   | Examiner   | Art Unit   |  |  |  |  |
|   | Raymond Phan   | 2181   |  |  |  |  |
| The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply  |  |  |  |  |  |  |
| A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).  - Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).  Status |  |  |  |  |  |  |
| 1) Responsive to communication(s) filed on  | _·   |  |  |  |  |  |
| 2a) This action is <b>FINAL</b> . 2b) ⊠ Thi   | s action is non-final.   |  |  |  |  |  |
| 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213. <b>Disposition of Claims</b>   |  |  |  |  |  |  |
| 4)⊠ Claim(s) 1-30 is/are pending in the application.  |  |  |  |  |  |  |
| ,—  | 4a) Of the above claim(s) is/are withdrawn from consideration. |  |  |  |  |  |
| 5) Claim(s) is/are allowed.   | · · · · · · · · · · · · · · · · · · ·                          |  |  |  |  |  |
| 6)⊠ Claim(s) <u>1-30</u> is/are rejected.   |  |  |  |  |  |  |
| 7) Claim(s) is/are objected to.   | Claim(s) is/are objected to.                                   |  |  |  |  |  |
| 8) Claim(s) are subject to restriction and/or election requirement.   |  |  |  |  |  |  |
| Application Papers  |  |  |  |  |  |  |
| 9)☐ The specification is objected to by the Examiner.   |  |  |  |  |  |  |
| 10)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner.   |  |  |  |  |  |  |
| Applicant may not request that any objection to the   |  |  |  |  |  |  |
| 11) The proposed drawing correction filed on  |  | oved by the Examiner.                                |  |  |  |  |
| If approved, corrected drawings are required in reply to this Office action.  12) The oath or declaration is objected to by the Examiner.   |  |  |  |  |  |  |
| Priority under 35 U.S.C. §§ 119 and 120   |  |  |  |  |  |  |
| 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).   |  |  |  |  |  |  |
| a) All b) Some * c) None of:  |  |  |  |  |  |  |
| 1. Certified copies of the priority documents have been received.   |  |  |  |  |  |  |
| 2. Certified copies of the priority documents have been received in Application No  |  |  |  |  |  |  |
| 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  * See the attached detailed Office action for a list of the certified copies not received.   |  |  |  |  |  |  |
| 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  |  |  |  |  |  |  |
| a) ☐ The translation of the foreign language provisional application has been received.  15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.  |  |  |  |  |  |  |
| Attachment(s)   |  |  |  |  |  |  |
| <ol> <li>Notice of References Cited (PTO-892)</li> <li>Notice of Draftsperson's Patent Drawing Review (PTO-948)</li> <li>Information Disclosure Statement(s) (PTO-1449) Paper No(s) 3.</li> </ol>   | 5) Notice of Informal  | y (PTO-413) Paper No(s) Patent Application (PTO-152) |  |  |  |  |

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### Part III DETAILED ACTION

## Notice to Applicant(s)

- 1. This application has been examined. Claims 1-30 are pending.
- 2. The Group and/or Art Unit location of your application in the PTO has changed. To aid in correlating any papers for this application, all further correspondence regarding this application should be directed to Group Art Unit 2181.

## Specification

3. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

## Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:

# A person shall be entitled to a patent unless --

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

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5. Claims 1, 4, 8-11, 14-18, 20-24, 26, 28, 30 are rejected under 35 U.S.C. § 102(e) as being anticipated by Doblar (EPO No. 1 014 615 A2).

In regard to claims 1, 4, 9, 11, 14, 16, 20, 23-24, 26, 30, Boblar discloses the integrated circuit comprising a driver having an output node to be coupled to the conductor external to the integrated circuit, such that driver launched an initial voltage value on the conductor when the driver changes states (see col. 8, line 56 through col. 9, line 20); and a receiver having input hysteresis, including an input node coupled to the output node of the driver, the input hysteresis having a threshold set such that the initial voltage value does not change an output state of the receiver (see col. 10, lines 1-26).

In regard to claims 8, 21, Doblar discloses the step of including an initialization circuit to drive an input node of the driver low during initialization (see col. 10, line 50 through col. 11, line 12).

In regard to claims 10, 15, Doblar discloses the step of including an initialization circuit to drive an input node of the driver low during initialization (see col. 10, line 50 through col. 11, line 12); the control circuit to turn on the termination terminals and to turn off the other termination terminal when at least one initialization circuit has performed (see col. 11, line 56 through col. 12, line 38).

In regard to claims 12, 17-18, 22, Doblar discloses the slew rate control circuit (see col. 15, lines 1-15).

In regard to claims 28, Doblar discloses the method of synchronizing an agent to a bi-directional bus comprising de-asserting a ready signal to drive a transmission line having a second agent driver present thereon to signify the agent is not ready to communicate on the bi-directional bus (see col. 11, lines 32-55);

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asserting a ready signal to signify the agent is ready to communication on the bidirectional bus (see col. 11, line 56 through col. 12, line 5); and monitoring the transmission line for an indication that both the agent and the second agent are ready to communicate on the bi-directional bus (see col. 12, lines 39 through col. 13, line 14).

### Claim Rejections - 35 USC § 103

- 6. The following is a quotation of 35 U.S.C. § 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 7. Claims 2-3, 5-7, 10, 13, 19, 27, 29 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Doblar in view of Klein (US NO. 6,040,714).

In regard to claims 2, 19, 29, Doblar teaches driver comprising the termination transistor (see col. 10, lines 38-59). But Doblar does not specifically disclose the driver comprising the pullup transistor having an output impedance, and the pulluown transistor having an output impedance, the output impedance of the pullup transistor being greater than the output of the pullup transistor. However Klein discloses disclose the driver comprising the pullup transistor having an output impedance, and the pulldown transistor having an output impedance, the output impedance of the pullup transistor being greater than the output of the pulldown transistor (see col. 3, line 62 through col. 4, line 10). Therefore, it would have been obvious to a person of an ordinary skill in the art at the time the invention was made to have combined the teachings of Klein within

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the system of Oblar because it would provide the voltage changes at the output terminals.

In regarding of claim 3, even though the teachings of Klein does not specifically disclose output impedance of the pullup transistor is at least 5 times greater than the output impedance of the pulldown transistor, however one skilled in the art would have understood that they can choose set the number of time being greater to fulfill their need.

In regarding of claims 5, 7, 13, 27, even though the teachings of Doblar or Klein does not specifically disclose the IC is the circuit type from the group of processor, memory, however one skilled in the art would have understood that they can choose to implement the design into variety of type of circuits to fulfill their need.

In regard to claims 6, Klein discloses the microprocessor coupled to the input node of the driver and the output node of the receiver, being configured to assert the ready signal to the output node of the driver and to monitor a signal on the output node of the receiver (see col. 2, line 47 through col. 3, line 13).

### Conclusion

- 8. Claims 1-30 are rejected.
- 9. The prior arts made of record and not relied upon are considered pertinent to applicant's disclosure.

Kerslake et al. (US No. 5,128,962) disclose a line interface circuit and a method of testing such a circuit.

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Biber et al. (US No. 5,134,311) disclose a self-adjusting impedance matching driver.

Winen et al. (US No. 5,164,960) disclose a medium attachment unit for use with twisted pair local area network.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to examiner Raymond Phan, whose telephone number is (703) 306-2756. The examiner can normally be reached on Monday-Friday from 6:30AM- 4:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's Primary, Paul Myers can be reached on (703) 305-9656 or via e-mail addressed to paul.myers@uspto.gov. The fax phone number for this Group is (703) 746-7239.

Communications via Internet e-mail regarding this application, other than those under 35 U.S.C. 132 or which otherwise require a signature, may be used by the applicant and should be addressed to [raymond.phan@uspto.gov].

All Internet e-mail communications will be made of record in the application file. PTO employees do not engage in Internet communications where there exists a possibility that sensitive information could be identified or exchanged unless the record includes a properly signed express waiver of the confidentiality requirements of 35 U.S.C. 122. This is more clearly set forth in the Interim Internet Usage Policy published in the Official Gazette of the Patent and Trademark on February 25, 1997 at 1195 OG 89.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 305-3900.

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PAUL R. MYERS PRIMARY EXAMINER

Paul K. Mys

Raymond Phan 6/3/03